

WHAT IS CLAIMED IS:

1. A reagent composition comprising:  
A tetrazolium dye;  
5 A phenazine electron transfer agent; and  
An effective amount of a Group IIIA compound and/or a flavin stabilizing agent.
2. The composition according to Claim 1, wherein said flavin stabilizing agent is  
FAD.
- 10 3. The composition according to Claim 1, wherein said Group IIIA stabilizing agent  
is a borate or boric acid.
4. The composition according to Claim 1, wherein said reagent composition  
15 comprises an analyte oxidizing signal producing system.
5. The composition according to Claim 4, wherein said analyte oxidizing signal  
producing system comprises an analyte oxidase.
- 20 6. The composition according to Claim 4, wherein said analyte oxidizing signal  
producing system comprises an analyte dehydrogenase.
7. The composition according to Claim 4, wherein said phenazine compound is PES.
- 25 8. The composition according to Claim 4, wherein said analyte oxidizing signal  
producing system further comprises an enzyme cofactor.
9. The composition according to Claim 1, wherein said composition is a fluid  
composition.

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10. The composition according to Claim 1, wherein said composition is a dry composition.
11. A reagent test strip comprising:
- 5 A substrate; and
- An analyte oxidizing signal producing system present on said substrate, wherein said analyte oxidizing signal producing system includes: (a) a water soluble tetrazolium salt; (b) a phenazine electron transfer agent; and (c) an effective amount of Group IIIA compound and/or flavin stabilizing agent.
- 10 12. The test strip according to Claim 11, wherein said wherein said flavin stablizing agent is FAD.
13. The test strip according to Claim 11, wherein said Group IIIA stabilizing agent is a
- 15 borate or boric acid.
14. The test strip according to Claim 11, wherein said analyte oxidizing signal producing system comprises an analyte oxidase.
- 20 15. The test strip according to Claim 14, wherein said phenazine is PES.
16. The test strip according to Claim 14, wherein said analyte oxidizing signal-producing system further comprises an enzyme cofactor.
- 25 17. The test strip according to Claim 10, wherein said analyte oxidizing signal producing system is a glucose oxidizing signal producing system.
18. An analyte detection or measurement system comprising:
- (A) A reagent test strip comprising:
- 30 (i) A substrate; and

- (ii) An analyte oxidizing signal producing system present on said substrate, wherein said analyte oxidizing signal producing system includes: (a) a water soluble tetrazolium salt; (b) a phenazine electron transfer agent; and (c) an effective amount of Group IIIA compound and/or flavin stabilizing agent; and
- 5 (B) An automated instrument.
19. A method for detecting the presence or determining the concentration of an analyte in a sample, said method comprising:
- (A) Applying said physiological sample to a reagent test strip comprising:
- 10 (i) A substrate; and
- (ii) An analyte oxidizing signal producing system present on said substrate, wherein said analyte oxidizing signal producing system includes: (a) a water soluble tetrazolium salt; (b) a phenazine electron transfer agent; and (c) an effective amount of Group IIIA compound and/or flavin stabilizing agent;
- 15 (B) Detecting said spot; and
- (C) Relating said detected spot to the presence or concentration of said analyte in said physiological sample.
20. The method according to Claim 19, wherein said signal producing system further
- 20 comprises an analyte oxidase.
21. The method according to Claim 20, wherein said phenazine is PES.
22. The method according to Claim 19, wherein said sample is whole blood or a
- 25 derivative thereof.
23. The method according to Claim 19, wherein said detecting and relating steps are carried out by an automated instrument.
- 30 24. A kit for use in determining the concentration of an analyte in a physiological sample, said kit comprising:

- (A) A reagent test strip comprising:
- (i) A substrate; and
  - (ii) An analyte oxidizing signal producing system present on said substrate, wherein said analyte oxidizing signal producing system includes: (a) a water soluble tetrazolium salt; (b) a phenazine electron transfer agent; and (c) an effective amount of Group IIIA compound and/or flavin stabilizing agent;
- (B) At least one of:
- (i) A means for obtaining said physiological sample and
  - (ii) An analyte standard.

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25. The kit according to Claim 24, wherein said means for obtaining said physiological sample is a lance.

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26. The kit according to Claim 24, wherein said analyte standard comprises a standardized concentration of a known reagent.

27. The kit according to Claim 24, wherein said kit comprises a means for obtaining said physiological sample and an analyte standard.

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28. A method for stabilizing a tetrazolium dye-phenazine reagent composition, said method comprising:

Including in said reagent composition an effective amount of a Group IIIA compound and/or a flavin stabilizing agent.

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29. The method according to Claim 28, wherein said Group IIIA compound is a borate or boric acid.

30. The method according to Claim 28, wherein said flavin is FAD.

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31. The method according to Claim 28, wherein said reagent composition is a dry composition.

32. The method according to Claim 28, wherein said reagent composition is a wet composition.

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